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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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EXAMINER

YAO, KWANG BIN

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2667

19

DATE MAILED: 09/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/147,970

Applicant(s)

SCHINDLER ET AL.

Examiner

Kwang B. Yao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16, 22-26 and 32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 22-26 and 32-34 is/are rejected.
- 7) ☒ Claim(s) 13-15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☒ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/1/03 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-12, 16, 22-26, 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Arango (US 5,732,078).

Arango discloses a communication system comprising the following features: regarding claim 1, as depicted in Fig. 6, a) locating the first switch (220) or the second switch (240) at an end terminal (210) of a user for connecting the end terminal (210) to a packet-switching network (23) or a line-switching network (260), the first switch (220) having access to a line-switching network managed by a network management system, selectively by line switching or packet switching; b) establishing a connection through

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the line-switching network (260) from the first switch (220) to an access point of the packet switching network (230); C) line-switching transferring of data through the connection from the first switch (220) to the access point of the packet-switching network (260); d) packeting of the data into data packets if the data do not yet exist as data packets, and packet-switching transferring of the data packets through the packet-switching network from the access point to the second switch; e) checking repeatedly whether a control signal exists which is triggered by a user of the end terminal or the network Management system for changing-over to a line-switching connection to the second switch (240) ; f) establishing the line-switching connection, during an existing transfer, from the first switch (220) to the second switch (240) through the line-switching network with a presence of the control signal, if the line-switching connection is not yet present; and g) changing-over to a line-switching data transfer during the existing transfer and transferring data over the line switching connection to the second switch (240);

regarding claim 2, a) locating the first switch (220) or the second switch (240) at an end terminal of a user connecting the end terminal to a packet switching network (230) or a line-switching network(260), the first switch (220) having access to the line-switching network (260) and the packet switching network (230), both managed by a network management system selectively by line switching packet switching; b) packeting the data into data packets in the first switch if the data does not yet exist as data packets; C) packet-switching transferring of the data packets through the packet-switching network (230) to the second switch (240); d) checking repeatedly whether a control signal exists which is triggered by a user of the end terminal or the network management system for transferring to a line-switching connection to the second switch; e) establishing the line-

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switching connection, during an existing transfer, through the line-switching network to the second switch (240) with a presence of the control signal, if the line-switching connection is not yet present; and f) changing-over to a line-switching data transfer during the existing transfer and transferring data over the line switching connection to the second switch (240); regarding claim 3, wherein the data packets after changing over to the line switching data transfer remain as data packets and are transferred as such by line-switching; regarding claim 4, wherein the data packets after changing to the line-switching data transfer are unpacketed, more particularly headers of the data packets are removed; regarding claim 5, wherein a same data channel is used to send the data packets to the access point to the packet-switching network (230) and to transfer the data through the line-switching network (260) to the second switch (240); regarding claim 6, wherein data packets are transferred to the access point to the packet-switching network (230) through a first data channel and the data are transferred for line-switching to the second switch -through a second data channel; regarding claim 7, wherein the line-switching network (260) is an ISDN network having ISDN switches, the data packets have a TCP/IP format and data channels used for the line-switching data transfer are ISDN B channels; regarding claim 8, wherein the control signal which triggers a change-over between the line-switching transfer and the packet-switching transfer is produced automatically when demands on a quality of a data transfer such as a time delay or a noise proportion is understepped or exceeded, or produced as a result of a command of the network management system or the end terminal, see column 11, lines 1-22; regarding claim 9, wherein, with the line-switching data transfer between the first switch (220) and the second switch (240) or between the first switch and the access point to the

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packet-switching network (230), the data of several users are multiplexed on one data channel by forming sub-channels of a fixed bandwidth; regarding claim 10, wherein the data of the user when line-switching is selected, are transferred line-switched with a transfer rate which corresponds to a fraction of the transfer rate of a bandwidth which is available as standard to the user; regarding claim 11, wherein the line-switching network (260) is an ISDN network and the data of the user to be transferred are transferred between the first (220) and the second (240) switches or between the first switch and the access point to the packet-switching network on a data channel with a bandwidth which is only a fraction of a standard bandwidth of 64 kbit/s, more particularly 32, 16, 8, 4, 2 or 1 kbit/s; regarding claim 12, wherein, in the first switch, only every n-th byte or every n-th bit of an ISDN frame is copied over and forwarded on a data channel to the second switch or to the access point to the packet-switching network, whereby an effective bandwidth of the line-switching data transfer is $(64/n)$ kbit/s; regarding claim 16, when the data is being transferred using the line-switching data transfer, further comprising the steps of: a) checking repeatedly whether a second control signal exists which is triggered by the user of the end terminal or the network management system for changing-over to a packet switching data transfer to the second switch (240); b) establishing a second connection through the line switching network (260), during the existing transfer, from the first switch (220) to the access point of the packet-switching network (230) with a presence of the second control signal, if the connection to the access point is no longer present; C) changing-over to a packet-switching data transfer during the existing transfer; d) line-switching transferring of the data through the connection or the second connection from the first switch (220) to the access point; and e) packeting of the data

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into data packets if the data does not yet exist as data packets, and packet-switching transferring of the data packets through the packet switching network from the access point to the second switch; regarding claim 22, wherein, with the line-switching data transfer between the first switch (220) and the second switch (240), the data of several users are multiplexed on one data channel by forming sub-channels of a fixed bandwidth; regarding claim 23, wherein the data of the user when line-switching is selected, are transferred line-switched with a transfer rate which corresponds to a fraction of the transfer rate of a bandwidth which is available as standard to the user; regarding claim 24, wherein the line-switching network (260) is an ISDN network and the data of the user to be transferred are transferred between the first and the second switches on a data channel with a bandwidth which is only a fraction of a standard bandwidth of 64 kbit/s, more particularly 32, 16, 8, 4, 2 or 1 kbit/s; regarding claim 25, wherein, in the first switch, only every n-th byte or every n-th bit of an ISDN frame is copied over and forwarded on a data channel to the second switch, whereby an effective bandwidth of the line-switching data transfer is $(64/n)$ kbit/s; regarding claim 26, when the data is being transferred using the line-switching data transfer, further comprising the steps of: a) checking repeatedly whether a second control signal exists which is triggered by the user of the end terminal or the network management system for changing-over to a packet switching data transfer to the second switch (240); b) changing-over to a packet-switching data transfer during the existing transfer with a presence of the second control signal; and c) packeting the data into data packets in the first switch if the data does not yet exist as data packets, and packet-switching transferring of the data packets through the packet-switching network to

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the second switch; regarding claim 32, wherein the end terminal is part of a local area network. See column 9-12.

4. Claims 33 and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Jonas et al. (US 6,137,792).

Jonas et al. discloses a system for routing and transmitting data packets comprising the following features: regarding claim 33, as depicted in Fig. 1, a) locating the first switch (20) or the second switch (21) at an end terminal (1 or 2) of a user for connecting the end terminal to a packet-switching network (40) or a line-switching network (30), the first switch having access to a line-switching network managed by a network management system; b) establishing a connection through the line-switching network (30) from the first switch (20) to an access point of the packet switching network (40); c) line-switching transferring of data through the connection from the first switch (20) to the access point of the packet-switching network; d) packeting of the data into data packets if the data do not yet exist as data packets, and packet-switching transferring of the data packets through the packet-switching network from the access point to the second switch (21); e) checking repeatedly whether a control signal exists which is triggered by a user of the end terminal or the network management system for hanging-over to a line-switching connection to the second switch (21); f) establishing the line-switching connection, during an existing transfer, directly from the first switch (20) to the second switch (21) solely through the line-switching network (20) with a presence of the control signal, if the line-switching connection is not yet present; and g) changing-over to a line-switching data transfer during the existing transfer and transferring data over the line switching connection to the second switch; regarding claim 34, a) locating the first

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switch (20) or the second switch (21) at an end terminal (1) of a user connecting the end terminal to a packet switching network (40) or a line-switching network (30), the first switch (20) having access to the line-switching network (30) and the packet switching network (40), both managed by a network management system; b) packeting the data into data packets in the first switch (20) if the data does not yet exist as data packets; C) packet-switching transferring of the data packets through the packet-switching network (40) to the second switch (21); d) checking repeatedly whether a control signal exists which is triggered by a user of the end terminal or the network management system for transferring to a line-switching connection to the second switch (21); e) establishing the line-switching connection, during an existing transfer, directly from the first switch (20) to the second switch (21) solely through the line-switching network (30) with a presence of the control signal, if the line-switching connection is not yet present; and f) changing-over to a line-switching data transfer during the existing transfer and transferring data over the line switching connection to the second switch (21). See column 3-6.

Allowable Subject Matter

5. Claims 13-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments filed 8/12/03 have been fully considered but they are not persuasive.

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On page 14, third paragraph, Applicant argues that the access points 220 and 240 are part of a network infrastructure and are not located at an end terminal. Examiner respectfully disagrees with these arguments. Nowhere in Arango discloses that the access points can be located at an end terminal. The access points are part of a network infrastructure does not mean that they cannot be placed at an end terminal.

On pages 15-17, Applicant argues that the claimed features recited in the newly added claims 33 and 34 are not disclosed by Arango. Examiner respectfully disagrees with these arguments. It is noted that the newly found reference of Jonas et al. discloses all the claimed limitations as discussed in paragraph 4 above.

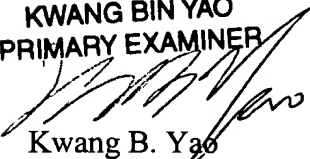
Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwang B. Yao whose telephone number is 703-308-7583. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H Pham can be reached on 703-305-4378. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

KWANG BIN YAO
PRIMARY EXAMINER



Kwang B. Yao
September 9, 2003